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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,396	03/31/2004	John C. Criscione	019214-0311428	5822
909 7590 05/04/2007 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER ZUBAJLO, JENNIFER L	
			ART UNIT 2609	PAPER NUMBER
			MAIL DATE 05/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/813,396

Applicant(s)

CRISCIONE, JOHN C.

Examiner

Jennifer Zubajlo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/26/2004 and 3/20/2006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ferdinand Niklsbacher (Patent Number: 5,270,709), hereinafter Niklsbacher.

For claim 1, Niklsbacher teaches:

An input device, comprising: an array of keys (see figure 1 keyboard unit 50 and column 2 lines 11-15) for inputting character values, data, or commands when selected, the array of keys further comprising at least one cluster of two or more thumb keys (see figure 1 units 64,65 and column 2 lines 19-25) positioned so as to be operable by a thumb of a user, and wherein the two or more thumb keys (see figure 1 units 64, 65 and column 2 lines 19-25) are oriented in substantially orthogonal and adjacent planes (see figure 2 and column 2 lines 19-25 and lines 33-39).

For claim 10, Niklsbacher teaches:

A keyboard, for with use with a computing device, comprising: an array of keys (see figure 1 keyboard unit 50 and column 2 lines 11-15) for inputting character values, data, or commands when selected, the array of keys further comprising a first thumb key, a

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second thumb key, and a third thumb key (see figure 1 units 64,65 and column 2 lines 19-25), each of which are positioned in substantially orthogonal and adjacent planes to one another (see figure 2 and column 2 lines 19-25 and lines 33-39) so as to be operable by a thumb of a user to enable the user to select the first thumb key, second thumb key, and third thumb key either individually or in combination (see column 3 lines 3-8).

For claim 11, Niklsbacher teaches:

A keyboard, for use with a computing device, comprising: an array of keys (see figure 1 keyboard unit 50 and column 2 lines 11-15) for inputting character values, data, or commands when selected, the array of keys further comprising at least one cluster of three keys positioned in substantially orthogonal and adjacent planes (see figure 2 and column 2 lines 19-25 and lines 33-39) so as to be operable either individually or in combination (see column 3 lines 3-8) by at least one digit of a user's hand, the at least one cluster of three keys further comprising: a first key that may be selected by a user when the at least one digit of the user's hand is moved forward from a neutral, resting position (see column 2 lines 39-53); a second key that may be selected by a user when the at least one digit of the user's hand is moved sideways from a neutral, resting position (see column 2 lines 39-53); and a third key that may be selected by a user when the at least one digit of the user's hand is moved downward from a neutral, resting position (see column 2 lines 39-53).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 3, 5, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferdinand Niklsbacher (Patent Number: 5,270,709) in view of Masakatsu Sugimoto (Patent Number: 5,847,697), hereinafter Sugimoto.

5. As to claim 2, Niklsbacher teaches the limitations of claim 1 as described above.

Niklsbacher does not teach the two or more thumb keys comprising a first thumb key, a second thumb key, and a third thumb key.

Sugimoto teaches two or more thumb keys comprising a first thumb key, a second thumb key, and a third thumb key (see figures 1-3 and column 6 lines 25-26 and lines 37-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Niklsbacher with the teachings of Sugimoto because it allows for more functionality with the same amount or fewer keys (see column 6 lines 54-60).

6. As to claims 3, 5, and 7 Niklsbacher teaches the limitations of claim 1 as described above and Sugimoto teaches the limitations of claim 2 as described above.

Niklsbacher also teaches a user selection of the first, second, or third thumb key by pushing the thumb in a forward, sideways, or downward direction (respectively), from

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a neutral, resting position (see column 2 lines 39-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Niklsbacher with the teachings of Sugimoto because it allows for more functionality with the same amount or fewer keys.

7. As to claim 9, Niklsbacher teaches the limitations of claim 1 as described above and Sugimoto teaches the limitations of claim 2 as described above.

Niklsbacher also teaches one or more thumb keys being operable individually or in combination (see column 3 lines 3-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Niklsbacher with the teachings of Sugimoto because it allows for more functionality with the same amount or fewer keys.

8. Claims 4, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferdinand Niklsbacher (Patent Number: 5,270,709) in view of Masakatsu Sugimoto (Patent Number: 5,847,697), and further in view of Frank Liebenow (Pub. No.: US 2002/0118175 A1), hereinafter Liebenow.

9. As to claims 4, 6, and 8 Niklsbacher and Sugimoto teach the limitations of claims 1-3, 5, and 7 as described above.

Niklsbacher and Sugimoto do not teach the first thumb key comprising a SHIFT key, the second thumb key comprising a CTRL key, or the third thumb key comprising an ALT key.

Liebenow teaches the first thumb key comprising a SHIFT key, the second thumb key comprising a CTRL key, and the third thumb key comprising an ALT key (see figure

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1 units 150, 152, 154, 156 and paragraph [0033]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Niklsbacher and Sugimoto with the teachings of Liebenow because these keys provide additional functionality when depressed in conjunction with another key (see [0033]).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Clark et al (Patent Number: 5,095,303), Charles A. Sellers (Patent Number: 5,864,334), Lori Grezeszak (Patent Number: 6,132,118), Rodney Phillip Jackson (Patent Number: 6,611,139), and Michael Charles Cooke (Pub. No.: 2003/0209641).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Zubajlo whose telephone number is (571) 272-2222. The examiner can normally be reached on Monday-Friday, 8 am - 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 270-1550. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer Zubajlo


AMARE MENGISTU
SUPERVISORY PATENT EXAMINER